Amendments to the Claims:

Please amend the claims to read as follows:

1. (canceled)
2. (canceled)
3. (canceled)
4. (currently amended) A method as claimed in claim ~~1~~ 32, wherein the step of performing said protection switch operation operates at ~~the~~ a path sublayer of said transport network~~, with said first BW higher than said second BW~~.
5. (canceled)
6. (canceled)
7. (currently amended) A method as claimed in claim ~~3~~ 32, wherein said step of performing the protection switch operation operates at ~~the~~ a line sublayer of said transport network between two tandem nodes.
8. (currently amended) A method as claimed in claim 7, wherein said step of ~~transmitting~~ allocating bandwidth to traffic for transmission over a working route comprises allocating said ~~first BW~~ bandwidth from ~~the~~ protected and unprotected connections classes ~~and accommodating said data pipe along a path between said two data terminals, including said two tandem nodes~~.
9. (canceled)
10. (canceled)
11. (currently amended) A method as claimed in claim ~~10~~ 34, wherein said step of transmitting comprises operating said data terminals to provide load sharing between said two routes~~, and accommodating said traffic along said first and second routes~~.
12. (currently amended) A method as claimed in claim ~~10~~ 34, ~~wherein said step of squeezing comprises accommodating said traffic along said first route whenever said second route~~

~~is interrupted, while~~ further comprising maintaining the ~~BW~~ bandwidth allocated to said ~~first~~ second route unchanged during the interruption of the first route.

13. (canceled)

14. (currently amended) A method as claimed in claim 11, wherein ~~said protection~~ the step of switching the traffic is operating at a path sublayer of said transport network~~, and said first and second BW are allocated from the unprotected connections class~~.

15. (currently amended) A method as claimed in claim 11, wherein ~~said protection switch~~ the step of switching the traffic is operating at a line sublayer of said transport network, and bandwidth allocated to the first route and bandwidth allocated to the second route ~~said first and second BW~~ are allocated from the protected and ET connections class, respectively.

16. (currently amended) A method as claimed in claim ~~1~~ 32, wherein said transport network is provided with means for path protection switching, said ~~traffic~~ data pipe uses ~~a first~~ the working route of said ~~first BW~~ allocated bandwidth during normal operation and ~~a diverse~~ the protection route during a path protection switch, and said ~~first BW~~ allocated bandwidth and said ~~second BW~~ reduced bandwidth are selected from the unprotected connections class.

17. (currently amended) A method as claimed in claim ~~1~~ 32, wherein said transport network is provided with path protection switching, and said ~~first BW~~ allocated bandwidth and said ~~second BW~~ reduced bandwidth are selected from the unprotected connections class.

18. (currently amended) An optical communication network for exchanging traffic between two data terminals connected at a respective end node, and recovering traffic in case of a fault at the physical layer, comprising:

an adaptive rate interface at each said end node for changing the transmit and receive rate ~~between~~ of traffic from a fast rate to a slow rate during a protection switch

and from the slow rate to the fast rate upon return to normal operation from the protection switch;

a link between said adaptive rate interfaces for accommodating a traffic pipe of a first BW corresponding to said fast rate during normal operation, and a squeezed traffic pipe of a second BW corresponding to said slow rate during ~~a~~ the protection switch; and

protection switching means for detecting an interruption in a flow of traffic through said traffic pipe and operating ~~a~~ the protection switch in response to the interruption.

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19. (currently amended) A network as claimed in claim 18, wherein said protection switching means operate at a path sublayer.

20. (currently amended) A network claimed in 19, wherein said adaptive rate interface is provided in said data terminal and operates to automatically change the data rate of the received and transmitted traffic between said fast and slow rates, in response to ~~response to~~ a flow control parameter.

21. (currently amended) A network as claimed in claim 19, wherein said adaptive rate interface is provided in said data terminal and operates to change the data rate of the received and transmitted traffic between said fast and said slow rates in response to a rate change signal received ~~form~~ from said protection switching means.

22. (original) A network as claimed in claim 18, wherein said adaptive rate interface comprises:

a plurality of ports on said data terminal;

means for turning on and off each said port, for automatically changing the operation data rate of the received and transmitted traffic between said fast and said slow rate in response to response to a flow control parameter.

23. (currently amended) A network as claimed in claim 18, wherein said adaptive rate interface comprises:

a plurality of ports on said data terminal;

means for turning on and off each said port, for changing the operation data rate of the received and transmitted traffic between said fast and said slow rate in response to a rate change signal received ~~form~~ from said protection switching means.

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24. (original) A network as claimed in claim 18 wherein said adaptive rate interface comprises an Ethernet mapper connected between said data terminal and said node for changing the mapping of data packets between said fast and said slow rates.

25. (currently amended) A method of operating an adaptive rate interface connected between a data terminal and an optical communication network comprising:

exchanging traffic of a first rate between said data terminal and said network in a normal state of operation;

transitioning from exchanging traffic of the first rate to exchanging traffic of a second rate slower than the first rate between said data terminal and said network during a squeezed state of operation; and

transitioning from said squeezed state of operation to said normal state of operation during a recovery state of operation.

26. (original) A method as in claim 25, wherein said network is a SONET/SDH network, said first rate is a STS-N, and said second rate is a STS-M, where M<N.

27. (currently amended) A method as claimed in claim 26, wherein the step of transitioning from said normal state of operation to said squeezed state of operation begins on receipt of STS path AIS.

28. (currently amended) A method as claimed in claim 26, wherein the step of transitioning from said squeeze state of operation to said normal state of operation begins on receipt of a recovered path AIS.

~~28.~~ 29. (currently amended) A method as claimed in claim 26, ~~wherein~~ further comprising transitioning from said squeezed state of operation to said recovery state of operation ~~begins~~ on receipt of an unequipped code on non-data ~~filed~~ field STSs.

~~29.~~ 30. (currently amended) A method as claimed in claim 26, ~~wherein~~ further comprising transitioning from said recovery state of operation to said normal state of operation ~~begins~~ when no path conditions are detected in the incoming traffic.

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~~30.~~ 31. (currently amended) A method as claimed in claim 26, ~~wherein~~ further comprising transitioning from said recovery state of operation from said squeezed state of operation ~~begins~~ on receipt of path AIS of all said STS-M.

32. (New) A method of providing traffic recovery in a transport network, comprising:

establishing a data pipe between a pair of end nodes in the transport network;

allocating bandwidth to traffic for transmission over a working route of the data pipe;

performing a protection switch operation; and

during the protection switch operation, reducing the bandwidth allocated to the traffic for transmission over a protection route of the data pipe.

33. (New) The method of claim 32, further comprising receiving a flow control message during the protection switch operation used for adapting to the reduction in bandwidth allocated to the traffic for transmission over the protection route.

34. (New) A method of providing traffic recovery in a transport network connecting two data terminals, comprising:

allocating a total bandwidth to traffic transmitted between the data terminals;

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distributing the total bandwidth between a first unprotected route and a second unprotected route between the data terminals;

transmitting unprotected traffic over the first route at a first transmission rate and unprotected traffic over the second route at a second transmission rate during normal operation of the transport network;

detecting an interruption of the transmission of unprotected traffic over the first route; and

upon detection of the interruption, switching the unprotected traffic from being transmitted over the first route to being transmitted over the second route.

35. (New) The method of claim 34, wherein the switched traffic is transmitted over the second route at a slower transmission rate than the first transmission rate.

36. (New) The method of claim 35, further comprising receiving during the interruption a flow control message used for adapting to the slower transmission rate of the traffic switched over the second route.